



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,251	12/21/2000	Andrew Issac Deitsch	RD-27,606	8203

6147 7590 09/07/2005

GENERAL ELECTRIC COMPANY
GLOBAL RESEARCH
PATENT DOCKET RM. BLDG. K1-4A59
NISKAYUNA, NY 12309

EXAMINER

DAVIS, ZACHARY A

ART UNIT	PAPER NUMBER
----------	--------------

2137

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/741,251

Applicant(s)

DEITSCH ET AL.

Examiner

Zachary A. Davis

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-101 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-101 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. A Request for Continued Examination with amendment was received on 16 June 2005. Claims 1, 10, 19, 26, 27, 36, 45, 54, 62, 70, 76, 84, 92, 100, and 101 have been amended. No claims have been added or canceled. Claims 1-101 are currently pending in the present application.

Response to Arguments

2. Applicant's arguments with respect to claims 1-101 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lloyd et al, US Patent 6219790, in view of Vorobiev, US Patent 6651063.

In reference to Claim 1, Lloyd discloses a gateway device including an authenticator authenticating the identity of a device (column 3, lines 23-30; column 4,

Art Unit: 2137

lines 15-21; column 5, lines 5-16), an access authorizer permitting interaction between the device and a service provider (column 3, lines 31-34; column 12, lines 8-15, noting column 11, lines 16-23), and an activity manager (column 4, lines 48-50; column 13, lines 2-21). However, Lloyd does not explicitly disclose the specific activities being managed. Vorobiev discloses a gateway device that includes an authenticator authenticating a device (column 9, lines 4-7) and a provider (column 6, lines 37-46), an access authorizer permitting the provider to interact with the device (column 7, lines 27-40; column 8, lines 55-65), and an activity manager that manages status and diagnostic information, usage history, notifications of failure, and status updates (column 19, line 63-column 20, line 6; see Figure 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gateway of Lloyd to include the features taught by Vorobiev, in order to simplify operations and processes (see Vorobiev, column 2, lines 3-35, especially lines 18-21) and in order to allow an entire household of smart appliances to be remotely diagnosed and maintained by a vendor (see Vorobiev, column 19, lines 58-62).

In reference to Claim 10, Lloyd discloses a gateway device including an authenticator authenticating the identity of a plurality of devices permitting interaction between the devices and service providers (column 3, lines 23-30; column 4, lines 15-21; column 5, lines 5-16), an access authorizer (column 3, lines 31-34; column 12, lines 8-15, noting column 11, lines 16-23), and an activity manager (column 4, lines 48-50; column 13, lines 2-21). However, Lloyd does not explicitly disclose the specific activities being managed. Vorobiev discloses a gateway device that includes an

Art Unit: 2137

authenticator authenticating devices (column 9, lines 4-7) and providers (column 6, lines 37-46), an access authorizer permitting the providers to interact with the devices (column 7, lines 27-40; column 8, lines 55-65), and an activity manager that manages status and diagnostic information, usage history, notifications of failure, and status updates (column 19, line 63-column 20, line 6; see Figure 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gateway of Lloyd to include the features taught by Vorobiev, in order to simplify operations and processes (see Vorobiev, column 2, lines 3-35, especially lines 18-21) and in order to allow an entire household of smart appliances to be remotely diagnosed and maintained by a vendor (see Vorobiev, column 19, lines 58-62).

In reference to Claim 19, Lloyd discloses a gateway device including a request handler (column 5, lines 59-64), an authenticator authenticating the identity of a device (column 3, lines 23-30; column 4, lines 15-21; column 5, lines 5-16), an access authorizer permitting interaction between the device and a service provider (column 3, lines 31-34; column 12, lines 8-15, noting column 11, lines 16-23), an activity manager (column 4, lines 48-50; column 13, lines 2-21), and a response component (column 10, lines 25-29; column 5, lines 29-37). However, Lloyd does not explicitly disclose the specific activities being managed. Vorobiev discloses a gateway device that includes a request handler receiving activity requests (column 19, lines 47-62), an authenticator authenticating a device (column 9, lines 4-7) and a provider (column 6, lines 37-46), an access authorizer permitting the provider to interact with the device (column 7, lines 27-40; column 8, lines 55-65), an activity manager that manages status and diagnostic

information, usage history, notifications of failure, and status updates (column 19, line 63-column 20, line 6; see Figure 6), and a response component (column 4, lines 28-43; column 10, lines 43-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gateway of Lloyd to include the features taught by Vorobiev, in order to simplify operations and processes (see Vorobiev, column 2, lines 3-35, especially lines 18-21) and in order to allow an entire household of smart appliances to be remotely diagnosed and maintained by a vendor (see Vorobiev, column 19, lines 58-62).

In reference to Claim 26, Lloyd discloses a gateway device including a request handler (column 5, lines 59-64), an authenticator authenticating the identity of a device (column 3, lines 23-30; column 4, lines 15-21; column 5, lines 5-16), an access authorizer permitting interaction between the device and a service provider (column 3, lines 31-34; column 12, lines 8-15, noting column 11, lines 16-23), an activity manager (column 4, lines 48-50; column 13, lines 2-21), a data format translator (column 3, lines 8-9; column 6, lines 56-60), and a response component (column 10, lines 25-29; column 5, lines 29-37). However, Lloyd does not explicitly disclose the specific activities being managed. Vorobiev discloses a gateway device that includes a request handler receiving activity requests (column 19, lines 47-62), an authenticator authenticating a device (column 9, lines 4-7) and a provider (column 6, lines 37-46), an access authorizer permitting the provider to interact with the device (column 7, lines 27-40; column 8, lines 55-65), an activity manager that manages status and diagnostic information, usage history, notifications of failure, and status updates (column 19, line

63-column 20, line 6; see Figure 6), and a response component (column 4, lines 28-43; column 10, lines 43-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gateway of Lloyd to include the features taught by Vorobiev, in order to simplify operations and processes (see Vorobiev, column 2, lines 3-35, especially lines 18-21) and in order to allow an entire household of smart appliances to be remotely diagnosed and maintained by a vendor (see Vorobiev, column 19, lines 58-62).

In reference to Claim 27, Lloyd discloses a gateway device including means for authenticating the identities of the service provider and device (column 3, lines 23-30; column 4, lines 15-21; column 5, lines 5-16), means for permitting the service provider to interact with the device (column 3, lines 31-34; column 12, lines 8-15, noting column 11, lines 16-23), and means for managing activities between the service provider and device (column 4, lines 48-50; column 13, lines 2-21). However, Lloyd does not explicitly disclose the specific activities being managed. Vorobiev discloses a gateway device that includes an authenticator authenticating a device (column 9, lines 4-7) and a provider (column 6, lines 37-46), an access authorizer permitting the provider to interact with the device (column 7, lines 27-40; column 8, lines 55-65), and an activity manager that manages status and diagnostic information, usage history, notifications of failure, and status updates (column 19, line 63-column 20, line 6; see Figure 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gateway of Lloyd to include the features taught by Vorobiev, in order to simplify operations and processes (see Vorobiev, column 2, lines 3-35, especially

lines 18-21) and in order to allow an entire household of smart appliances to be remotely diagnosed and maintained by a vendor (see Vorobiev, column 19, lines 58-62).

In reference to Claim 36, Lloyd discloses a system including at least one appliance in a first network (Figure 1, workstation 128; column 5, lines 38-40); a service provider in a second network (Figure 1, elements 110, 114, 116, for example; column 4, lines 15-21); and a gateway device including an authenticator authenticating the identity of the appliance (column 3, lines 23-30; column 4, lines 15-21; column 5, lines 5-16), an access authorizer permitting interaction between the device and the service provider (column 3, lines 31-34; column 12, lines 8-15, noting column 11, lines 16-23), and a service manager (column 4, lines 48-50; column 13, lines 2-21). However, Lloyd does not explicitly disclose the specific activities being managed. Vorobiev discloses a system including an appliance in a first network (Figure 6, smart appliance 609); a provider in a second network (Figure 6, provider/appliance vendor 614); and a gateway device that includes an authenticator authenticating an appliance (column 9, lines 4-7) and a provider (column 6, lines 37-46), an access authorizer permitting the provider to interact with the appliance (column 7, lines 27-40; column 8, lines 55-65), and an activity manager that manages status and diagnostic information, usage history, notifications of failure, and status updates (column 19, line 63-column 20, line 6; see Figure 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gateway of Lloyd to include the features taught by Vorobiev, in order to simplify operations and processes (see Vorobiev, column

2, lines 3-35, especially lines 18-21) and in order to allow an entire household of smart appliances to be remotely diagnosed and maintained by a vendor (see Vorobiev, column 19, lines 58-62).

In reference to Claim 45, Lloyd discloses a system including at least one device in a first network (Figure 1, workstation 128; column 5, lines 38-40); a service provider in a second network (Figure 1, elements 110, 114, 116, for example; column 4, lines 15-21); and a gateway device including an authenticator authenticating the identity of the device (column 3, lines 23-30; column 4, lines 15-21; column 5, lines 5-16), an access authorizer permitting interaction between the device and the service provider (column 3, lines 31-34; column 12, lines 8-15, noting column 11, lines 16-23), and an activity manager (column 4, lines 48-50; column 13, lines 2-21). However, Lloyd does not explicitly disclose the specific activities being managed. Vorobiev discloses a system for securely providing remote monitoring and diagnostics (column 19, lines 58-62) including an device in a first network (Figure 6, smart appliance 609); a provider in a second network (Figure 6, provider/appliance vendor 614); and a gateway device that includes an authenticator authenticating an appliance (column 9, lines 4-7) and a provider (column 6, lines 37-46), an access authorizer permitting the provider to interact with the appliance (column 7, lines 27-40; column 8, lines 55-65), and an activity manager that manages status and diagnostic information, usage history, notifications of failure, and status updates (column 19, line 63-column 20, line 6; see Figure 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gateway of Lloyd to include the features taught by

Art Unit: 2137

Vorobiev, in order to simplify operations and processes (see Vorobiev, column 2, lines 3-35, especially lines 18-21) and in order to allow an entire household of smart appliances to be remotely diagnosed and maintained by a vendor (see Vorobiev, column 19, lines 58-62).

Claim 54 is directed to a method corresponding substantially to the device of Claim 1, and is rejected by a similar rationale.

Claim 62 is directed to a method corresponding substantially to the device of Claim 10, and is rejected by a similar rationale.

Claim 70 is directed to a method corresponding substantially to the device of Claim 19, and is rejected by a similar rationale.

Claim 76 is directed to a method corresponding substantially to the system of Claim 36, and is rejected by a similar rationale.

Claim 84 is directed to a method corresponding substantially to the system of Claim 45, and is rejected by a similar rationale.

Claim 92 is directed to a software implementation of the device of Claim 1 performing the method of Claim 54, and is rejected by a similar rationale. Further, Lloyd discloses that the device and method may be implemented in hardware, software, or a combination of the two (column 13, lines 22-25).

Claim 100 is directed to a software implementation of the device of Claim 10 performing the method of Claim 62, and is rejected by a similar rationale. Further, Lloyd

discloses that the device and method may be implemented in hardware, software, or a combination of the two (column 13, lines 22-25).

Claim 101 is directed to a software implementation of the device of Claim 19 performing the method of Claim 70, and is rejected by a similar rationale. Further, Lloyd discloses that the device and method may be implemented in hardware, software, or a combination of the two (column 13, lines 22-25).

In reference to Claims 2, 11, 20, 28, 37, and 46, Lloyd further discloses a digital signature identifying the gateway device (column 6, lines 26-30).

In reference to Claims 3, 12, 21, 29, 38, 47, 55, 63, 71, 77, 85, and 93, Lloyd further discloses a digital signal verifier (column 6, lines 6-10).

In reference to Claims 4, 13, 22, 30, 39, 48, 56, 64, 72, 78, 86, and 94, Lloyd further discloses a cryptographic component (column 5, lines 52-64). Vorobiev also discloses the use of encryption (column 9, lines 4-7).

In reference to Claims 5, 14, 23, 31, 40, 49, 57, 65, 73, 79, 87, and 95, Lloyd further discloses specifying permitted activities (column 6, lines 17-21). Vorobiev also discloses specifying permitted activities (column 7, line 62-column 8, line 4).

In reference to Claims 6, 15, 32, 41, 50, 58, 66, 80, 88, and 96, Lloyd further discloses a request handler (column 5, lines 59-64). Vorobiev also discloses a request handler receiving activity requests (column 19, lines 47-62).

In reference to Claims 7, 16, 33, 42, 51, 59, 67, 81, 89, and 97, Lloyd further discloses a response component (column 10, lines 25-29; column 5, lines 29-37).

Art Unit: 2137

Vorobiev also discloses a response component (column 4, lines 28-43; column 10, lines 43-46).

In reference to Claims 8, 17, 24, 34, 43, 52, 60, 68, 74, 82, 90, and 98, Lloyd further discloses a data format translator (column 3, lines 8-9; column 6, lines 56-60).

In reference to Claims 9, 18, 25, 35, 44, 53, 61, 69, 75, 83, 91, and 99, Lloyd further discloses a network protocol translator (column 2, lines 58-67).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Hayes et al, US Patent 6480586, discloses an appliance gateway for allowing remote access to smart appliances.

b. Raschke et al, US Patent 6653933, discloses a network allowing remote control and monitoring of a smart appliance through a gateway.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone

Art Unit: 2137

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ZAD
zad

E. L. MOISE
EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER